

DESCRIPTIONS OF NEW AUSTRALIAN PLANTS, WITH
OCCASIONAL OTHER ANNOTATIONS ;

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(Continued.)

EUGENIA MINUTULIFLORA.

Glabrous ; branchlets almost cylindric ; leaves rather light green, obovate or elliptic-cuneate, gradually narrowed into a short petiole, without lustre on either page, slightly paler beneath, their venulation pinnular, subtle, immersed, their punctation seldom anywhere transparent ; panicles rather small, but trichotomously brachiate ; flowers extremely small ; calyces attenuated into very short, often ternate pedicels, smooth, the lobes of each minute ; petals about half exserted, long continuing connivent or calyptrate ; stamens extremely short, never very numerous, their anthers ovate-roundish, opening by longitudinal slits ; style hardly emerging ; fruit rather large, depressed-globular, its pericarp somewhat succulent, whitish outside.

Near Port Darwin ; M. Holtze.

This species stands systematically very near *E. Smithii* in floral and carpic characteristics, but the leaves are of quite different shape and not shining nor dark-green above, while none of the anthers are biglobular, and all open with lateral dehiscence. *E. Armstrongi*, of which I have seen no authentic specimen, and of which the fruits remain unknown, cannot be our present plant, as Bentham kept it out of the section *Syzygium*, and indicates the petals and stamens as of greater length. *Eugenia Holtzei*, from material recently received, shows the following principal carpic qualities :—Ripe fruit urceolate-globular, $\frac{1}{4}$ -inch to $\frac{1}{3}$ -inch long, dark purplish outside, truncate at the summit, one-seeded.

EUGENIA APODOPHYLLA.

Glabrous ; branchlets prominently quadrangular ; leaves rather small, firmly chartaceous, long-acuminate, with rounded base sessile, pinnately thin-venulated, their punctation much concealed ; flowers small, from two to four together between terminal leaves ; peduncles none ; calyx passing gradually into the twice longer pedicel, almost truncate, punctular-scabrous ; petals at first coalescent into an hemispheric lid, but some finally expanding ; stamens much longer than the petals ; anthers roundish when open ; style elongated ; ovulary sunk deeply ; fruit reddish.

On high summits of the Bellenden-Ker's Ranges ; W. Sayer.

Tree to 40 feet high, so far as known. Branchlets sometimes upwards quite membranously margined. Leaves 1 inch to $2\frac{1}{2}$ inches long. United pedicels and flower-buds club-shaped. Petals measuring hardly $\frac{1}{8}$ inch. Longest stamens fully $\frac{1}{3}$ inch.

Ovulary two-celled, with rather numerous ovules. Fruit not available in a ripe state.

In form of flowers this plant comes very near *E. lanceolata*, but not in their disposition, while the absence of petioles and the shape of the leaves give our species already a totally different outer appearance.

The richness of the Bellenden-Ker's Ranges in peculiar plants was foreseen by myself in 1855, on account of their isolated high elevations; and the correctness of this anticipation was demonstrated by Mr. Sayer's mission, which—may it be said in justice to him—drew first scientific attention to the exuberance in the vegetable endemism there. But R. Brown must have had already a presentiment of those plants-riches, when he induced, in 1802, Captain Flinders to bestow on yonder mountains the name of the subsequent elucidator of so many Iridææ.

EUGENIA HEDRAIOPHYLLA.

Glabrous; branchlets very prominently quadrangular; leaves rather large, chartaceous, elliptic-lanceolar, gradually acuminate, with rounded base almost sessile, their venulation faint, pinnate and immersed, their punctation copious but very subtle; flowers small, in ample brachiate panicles; peduncles from decurrent prominences very quadrangular; flowers frequently ternate on the ultimate peduncles; pedicels extremely short or obliterated; calyx hemispheric-turbinate, slightly lobed or almost truncate; petals hardly expanding; anthers very minute, about as long as broad; style capillary thin; ovulary much sunk; fruit quite small, almost globular, one-seeded, terminated by a comparatively broad limb of thin structure, and separated from it by some constriction; pericarp very thin.

Mossman's-River; Sayer. Russell's-River; Johnson.

Among Australian congeners nearest to *E. angophoroides*, which is now also known from Fitzroy-River and Trinity-Bay, but specifically separable by larger, almost sessile leaves, not gradually narrowed in to the base, with much thinner venulation; further, by the nearly membranously angular branches of the inflorescence, almost complete absence of pedicels, less denticulated calyces broader at the base, and by the fruit, even in a ripe state, being edged by a higher rim. *Eugenia Ventenatii* is still further removed already by much larger fruits, although the leaf venulation in that species is also very thin. Our new plant has the very angular peduncles in common with *E. lanceifolia*, which species moreover has very similar leaves, but its flowers are of larger size, the calyx is semi-ovate and conspicuously lobed, and the fruit is very much longer. Notable remains also some similarity to *E. cordifolia* and *E. Neesiana*, but neither of these has the

remarkably angular branches and peduncles of our plant, and their fruits are much larger.

EUGENIA JOHNSONI.

Glabrous; branchlets almost cylindrical; leaves of firm consistence, mostly ovate-lanceolar, much contracted towards the blunt summit, gradually narrowed into a conspicuous petiole, rather prominently pinnular-venulated, but with concealed punctation; peduncles slender, axillary and terminal, from three- to several-flowered; bracteoles narrow, fugacious; tube of the calyx smooth, passing gradually into the pedicel; lobes four, rather large, almost semi-ovate, during anthesis as long as the tube or longer, devoid of any conspicuous membranous margin; anthers narrow-elliptic; fruit comparatively large, one-seeded, turgid-ovate, but excavated and slightly incurved four-lobed at the summit, its pericarp succulent, outside red.

Mount Bartle Frere, at about 4,000 feet elevation; there associated with *Halfordia*, which, when in fruit, bears great resemblance to this *Eugenia*; S. Johnson.

A tree, known to attain a height of 40 feet. Leaves seldom more than 3 inches long and $1\frac{1}{2}$ broad, but often smaller. Inflorescence $2\frac{1}{2}$ inches or less long. Calyx before expansion clavate-ovate, lobes nearly $\frac{1}{4}$ inch long, showing no pale membranous dilatation and only slightly overlapping in bud. Petals only to a small extent overreaching the calyx. Fruit $\frac{1}{2}$ to $\frac{3}{4}$ inches long; its pericarp rather thick, of subacid and somewhat aromatic taste. Seed turgidly ovate, about $\frac{1}{3}$ -inch long; its cotyledons one above the other. The unexpanded flowers resemble those of some *Eucalypts*, and impart to this species a peculiar appearance.

Near *E. Tierneyana*; but that species recedes in thinner and often more elongated leaves, with more distant and therefore fewer primary venules, in ampler florescence, in almost semi-orbicular calyx-lobes conspicuously membranous towards the margin, in shorter and thus more globular fruits. As *Eugenia Sayeri* a plant has now been distinguished from the same region. This additional species has leaves much like those of *E. Johnsoni*, but flowers similar to those of *E. Tierneyana*. The fruits of this congener remain unknown.

Specimens of several other new Australian *Eugenias* accumulated through many years in our collections; but the material is still insufficient for offering satisfactory diagnoses of them.

Eugenia Armstrongi has been found recently by Mr. Nicholas Holtze near Port Darwin. From it differs *E. angophoroides* in angular branchlets, broader leaves above darker coloured and with a rather less prominent venulation, somewhat smaller flowers devoid of conspicuous pedicels, less lobed calyces, evidently larger fruits outside blackish.

E. myrsinocarpa is a species collected by Fitzalan at Trinity-Bay, with shorter, less closely venulated, and more acuminate leaves, very thin ultimate peduncles, less broad, indeed quite globular, fruits. Leaves much like those of *E. apodophylla*.

E. carissoides is now also known from Cape York and Endeavour-River

E. hemilampira occurs on Mossman's-River (Sayer), Endeavour-River (Persieh), Mt. Bartle Frere (Johnson).

E. cormiflora grows on Endeavour-, Daintree-, and Johnstone-Rivers. The fruit is there much eaten by the autochthones.

E. Tierneyana extends to Trinity-Bay (Sayer) and Daintree-River (Fitzalan).

EMBELIA FLUECKIGERI.

Leaves on corrugated short petioles, of firm texture, almost elliptic, at the base blunt, devoid of denticulation, closely reticular-venulated, glabrescent; panicles densely tomentellous; pedicels very short or some almost absent; segments of the calyx five, rather long, narrow-elliptic; petals of about double calyx-length, tender-membranous; stamens five, about as long as the petals, their filaments scantily beset with hairlets, the anthers broadly cordate; ovulary and lower portion of the style short-lanuginous.

Russell-River; Stephen Johnson.

Shrub of somewhat laurineous aspect, though of rambling habit. Leaves to 4 inches long, to 1½ inch broad, shining on both sides, hardly paler beneath, their pellucid pores not readily visible. Branches of the panicle numerous, but mostly short. Vestiture of the inflorescence brownish. Flowers in racemose clusters. Bracts of rather conspicuous size. Petals about ¼ inch long, very perceptibly dotted, much less pubescent than the calyx. Filaments linear-setaceous. Fruit yet to be obtained. Allied to *E. Nagushia*, but the leaves are neither distinctly acuminate, nor narrowed into the petiole; further, the flowers are larger and neither tetramerous nor glabrous. From *E. Cattam* it differs already in larger, less pointed leaves, ampler inflorescence and longer calyx. The species is very different from our only other indigenous congener, namely *E. Australiana*. Two older names exist for the genus *Embelia*, but neither became supported or confirmed by any quoted or implied species-names. Several of the Australian Myrsines are referable to *Labisia*, on account of the valvular preflourescence of their corolla.

This plant, of a medicinal genus, is dedicated to Dr. Friederich Flückiger, the meritorious Professor of Pharmacology in the University of Strassburg, at about the time of his septuagenarian's jubilee as a public scientific festival.

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